

BeAGLE & the ePb paper

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BeAGLE Changes for e+Pb/Au (examples)

- Released
 - Larger 4-momentum errors
- Unreleased
 - INC bug fixed which reduced INC by $1/A$
- ToDo – straightforward
 - Release Elke's Pythia changes.
 - Turn on parton showering in e+A in BeAGLE
 - Apply Pythia tune (e.g. don't understand pdf used)
- ToDo – open-ended
 - Further 4-momentum errors

Priority question (starting in about 1 week)

- $e+Pb$ vs. $e+{}^3He$ vs. $e+D$
 - $e+Pb$ to get paper finalized
 - 1** – Pythia changes, parton showering and tune most urgent
 - These can drive, e.g., multiplicity agreement
 - 3** – 4-momentum conservation
 - (5)** – Note: Adding RAPGAP also useful, but takes longer
 - 2** • $e+{}^3He$ w/ struck n is very sick (80% reroll)
 - 4** • $e+D$ new kinematics 4-momentum conservation
 - For me the urgency here was driven by DIS + Kong's interest.